

INCH-POUND

MIL-DTL-25707/1B  
25 July 1999  
SUPERSEDING  
MIL-A-25707/1A (USAF)  
31 January 1977

# DETAIL SPECIFICATION SHEET

## ANTENNA, FLUSH MOUNT, TYPE AT-740/A

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the antenna described herein shall consist of this document and the latest issue of MIL-DTL-25707.

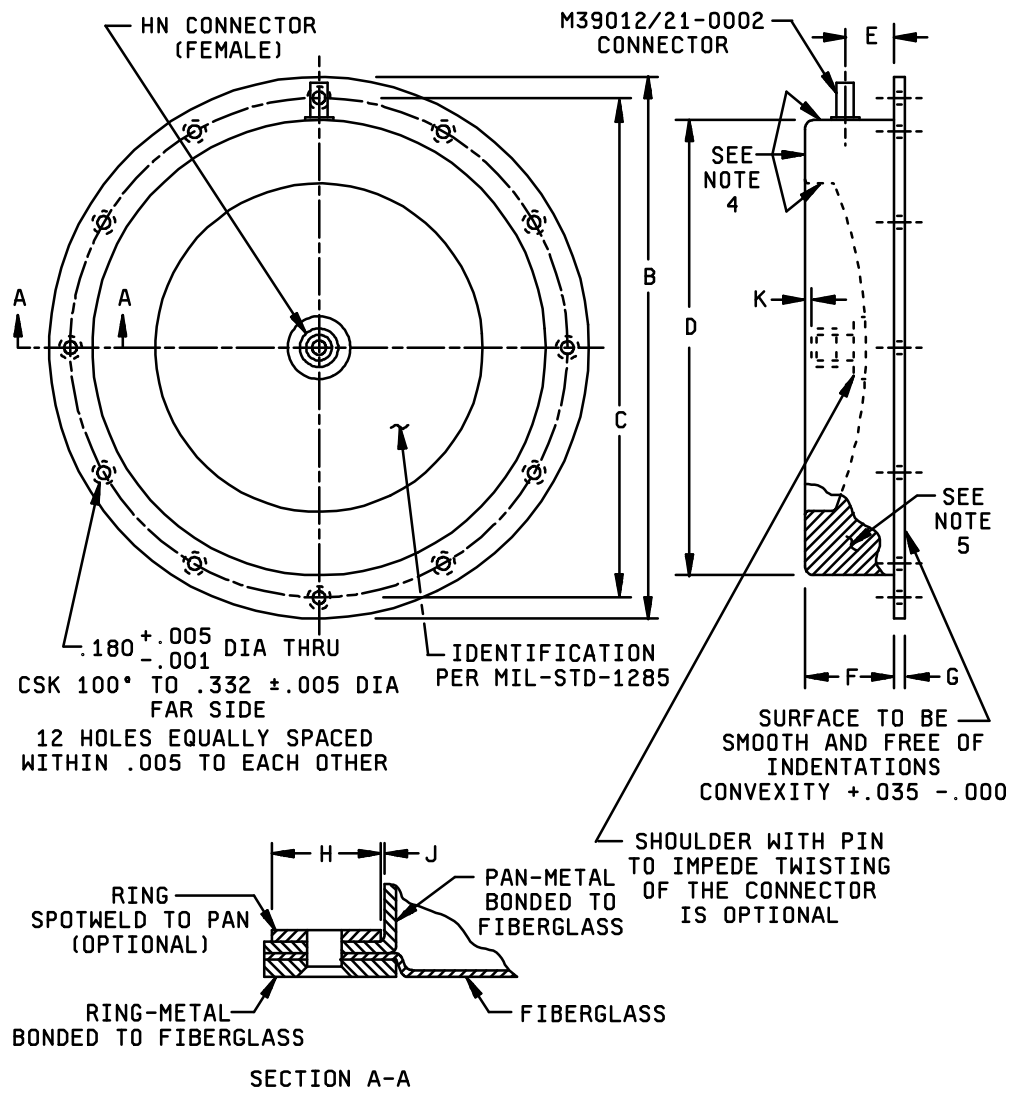


FIGURE 1. Outline drawing antenna AT-740/A.

## MIL-DTL-25707/1B

Letter	Dimensions			
	Inches		Millimeters	
	Min	Max	Min	Max
B	8.391	8.421	213.13	213.89
C	7.714	7.724	195.94	196.19
D	---	7.109	---	180.57
E	.750	---	19.05	---
F	---	1.500	---	38.10
G	.141	.156	3.58	3.96
H	.60	.72	15.24	18.29
J	.00	.12	0.00	3.05
K	.08	.14	2.03	3.56

## NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only and are based upon 1.00 inch = 25.4 mm.
3. Unless otherwise specified, tolerances are  $\pm .015$  inch ( $\pm 0.38$  mm) for three place decimals and  $\pm .03$  inch ( $\pm 0.76$  mm) for two place decimals.
4. Finish: Anodize in accordance with MIL-A-8625, paint with off-white epoxy primer.
5. Fill antenna cavity with polyurethane foam, or equivalent, with density as necessary to maintain structural rigidity, radiation pattern as specified, and compliance to environmental requirements.

## REQUIREMENTS:

Dimensions and construction: See figure 1.

Temperature operating range:  $-55^{\circ}\text{C}$  to  $+205^{\circ}\text{C}$ .

Frequency: 960 MHz to 1,220 MHz.

Impedance: 50 ohms, nominal.

VSWR of antenna: 960 MHz to 1,220 MHz, 1.8:1, maximum.  
1,000 MHz to 1,100 MHz, 1.6:1, maximum.

VSWR of sampling probe: 960 MHz to 1,220 MHz, 1.5:1, maximum.

Probe attenuation: 17.5 dB  $\pm$  1.5 dB over frequency band 960 MHz to 1,220 MHz.

Power: 4 kW, peak; 100 watts, average.

Weight: Less than or equal to 16 ounces.

Part or Identifying Number (PIN): M25707/1-01.

Data list: The measured data for VSWR, attenuation, and impedance shall accompany each antenna.

Custodian:  
Air Force - 11  
DLA - CC

Preparing activity:  
DLA - CC

(Project 5985-F641-01)